

REMARKS

Claims 1-26 are currently pending and under examination. Claims 1, 15, 19 and 23 are amended herein. The present claims amendments are supported throughout the specification and claims as originally filed. For example, support for the amendment to claim 1 can be found, *inter alia*, at page 6, lines 1-4; page 21, lines 23-25; page 22, lines 24-28; etc. Claims 15, 19 and 23 are amended herein to update the reference characters to subparts of these claims in accordance with the Office's request. No new matter is added and entry of the present amendment is respectfully requested.

Information Disclosure Statement

The Office has indicated that the non-patent literature referenced in the applicant's information disclosure statement was not considered as copies were apparently not provided. The applicant includes copies of these references, together with the present response, for consideration by the Office.

Claim Objections

The Office has objected to claims 15, 19 and 23 as purportedly incorporating informalities, "which may cause confusion with the claim numbering." To expedite prosecution, claims 15, 19 and 23 are amended herein to replace the numerical sub-part references therein. As such, withdrawal of the objection to these claims is respectfully requested.

Rejections Under 35 U.S.C. § 103

Claims 1-2, 8-9 and 13-14 stand rejected under 35 U.S.C. § 103 as purportedly obvious over U.S. Patent No. 6,061,697 (*Nakao*), in view of U.S. Patent No. 5,805,897 (*Glowny*). The Office has asserted that *Nakao* discloses multiple limitations present in pending claim 1 (citing *Nakao*'s abstract and col. 5, lns. 5-25 in support), but not all of the limitations of this claim. In this regard, the Office indicates that "Nakao fails to disclose that said multiple fragment editor executables are distributed among multiple sites of a computer network and operate in a peer-to-peer environment without the need for a central server." Office action, page 3 (emphasis added). The Office then refers to *Glowny* and indicates that "Glowny discloses the advantages of a peer-to-peer network over a centralized network as in Nakao." As such, the Office concludes that "it

would have been obvious to one of ordinary skill in the art at the time of the invention to use a peer-to-peer network as in *Glowny* in combination with *Nakao*'s invention because it would provide 'flexibility without the cost and risks if a single server' (*Glowny*, col. 5, lines 1-2)." *Id.*

Applicant respectfully traverses the rejection. First of all, the *Nakao* and *Glowny* references are not properly combinable. Moreover, the asserted combination of *Glowny* with *Nakao* fails to teach at least the following elements of claim 1: (1) "multiple fragment editor executables that function cooperatively as one implemented document type declaration (DTD)"; (2) operation "in a peer-to-peer environment without need for a central server"; and (3) "allowing multiple authors to edit the distributed document contemporaneously while allowing each of the multiple authors to view edits made by others of the multiple authors contemporaneously."

***Nakao* And *Glowny* Are Not Properly Combinable**

As the Office is aware, motivation to combine references must be present otherwise a combination thereof is not considered obvious. *See, e.g., In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) (the showing of combinability of two or more references, must be "clear and particular."). The Office proposes that, in light of *Glowny*, one of skill in the art would be motivated to remove the server requirement of *Nakao*. The *Nakao* server is characterized by the Office as risky and costly. Respectfully, a clear and particular showing of combinability of *Glowny* with *Nakao* has not been set forth by the Office.

Upon a review of *Nakao*, one of skill in the art would understand that *Nakao* functioning requires a server. The strength of *Nakao*'s client-server is that its clients know what piece they want to retrieve from the server and consequently what to do with it. It is well known in the art that client-server client views are different from each other, which contrasts directly with the claimed system.¹ If the *Nakao* system were converted to a peer-to-peer system, as the Office

¹ In the claimed system, multiple participants viewing the same document over time and space is made possible by the event-driven behavior of the claimed system. Consequently, in one aspect the document at each site in the system is a behavioral replicate of not only the content, but the system semantic context accompanied by element node executables at each node. Contemporaneous viewing of a document by multiple authors is dependent on the document comprising a constant replica at each site. All changes made at each site are synchronously applied to all other sites, thus eliminating the need for each site to ask for, or know, where to put each site's edits. Guided by the framework of the evolving distributed DTD, authors create and alter executables in parallel without encroaching on

suggests, its client-server strength would become its weakness since there would be no inherent mechanism for a *Nakao* server set of nodes to locate its client's element nodes. Importantly, locating a client is not the same as locating a particular element node in a client's running application. Thus, there is no suggestion in *Nakao* to modify its teachings to remove the centralized server. In contrast, *Nakao*'s system depends on the use of a centralized server and teaches away from the peer-to-peer environment of the present claims.

Relatedly, it is not clear how *Nakao* would be modified to (1) eliminate the client-server model; and (2) metamorphose its described functionality to suggest the present claims in light of *Glowny*. As described in further detail below, significant alterations in fundamental aspects of *Nakao* would be required to teach or suggest the limitations of the present claims that are not taught or suggested by this reference. *Glowny* certainly does not reference the *Nakao* system and indicate how it should be modified to operate within *Glowny*'s parameters. Moreover, *Nakao* does not provide a suggestion that its invention could be improved on by altering a fundamental aspect, nor how this would be accomplished. As such, the combination of *Nakao* with *Glowny* produces a seemingly inoperable system. The Federal Circuit has provided guidance in these types of circumstances and indicated that “[i]f references taken in combination would produce a seemingly inoperative device, we have held that such references teach away from the combination and thus cannot serve as predicates for a *prima facie* case of obviousness.”

McGinley v. Franklin Sports, Inc., 60 USPQ2d 1001, 1010 (Fed. Cir. 2001) (internal citation omitted).

The Asserted Combination Fails To Teach All Of The Elements Of Claim 1

One Implemented Document Type Declaration / Editing and Viewing

Nevertheless, assuming *arguendo* that *Nakao* is combinable with *Glowny* under the rationale set forth by the Office, this combination fails to teach several elements of claim 1. In this regard, the applicant submits that *Nakao*, in fact, does not teach or suggest “allowing multiple authors to edit the distributed document contemporaneously while allowing each of the multiple authors to view edits made by others of the multiple authors”, as set forth in

each other's semantic areas. As such, all executables stay up to date. See, e.g., the specification, Sections 4.2, 4.20, 4.30, 5.1, 5.4, 5.6.1, etc.

independent claim 1. It is the Office's position that col. 5, lines 5-25 of *Nakao* teach this aspect. Respectfully, this section of *Nakao* does not appear to provide any indication of "contemporaneous" editing and viewing as contemplated in the present claims, and clarified by the amendment to claim 1 included herein. In contrast, *Nakao* describes a system that can create, edit and re-use SGML documents throughout their life-cycle. *See, e.g.*, *Nakao* col. 1, lns 49-50; col. 6, lns 38-39; col. 32, lns. 38-39; and col. 33, ln. 39. *Nakao*'s term "use" functions as follows: For a particular *Nakao* system client, *e.g.*, client X, to view a complete document, a request would have to be made to update all of the elements at client X's site since any or all of the other DTD element contents may have changed. This is a consequence of the *Nakao* system using the client-server model for distributed document control. *See, e.g.*, *Nakao*, Figure 3. It is well known in the art that client-server clients require refreshing (*i.e.*, are not synchronously and/or contemporaneously updated) when changes occur at the server. Therefore, each of the *Nakao* clients lack the ability to contemporaneously view a document as it is edited by other clients. Thus, it is clear that *Nakao* fails to teach or suggest "allowing multiple authors to edit the distributed document contemporaneously while allowing each of the multiple authors to view edits made by others of the multiple authors contemporaneously." Notably, *Glowny* does not teach or suggest this aspect either.

Assuming *arguendo* that the only limitations of claim 1 that *Nakao* fails to teach or suggest comprise those specifically listed by the Office (in contrast to the above discussion),² *Glowny* fails to fill in the gaps left by the *Nakao* reference. In this regard, the Office asserts that *Glowny* teaches or suggests "multiple fragment editor executables . . . distributed among multiple sites of a computer network . . . operat[ing] in a peer-to-peer environment without the need for a central server."

One Implemented Document Type Declaration / Peer-To-Peer

As should be clear from the amended claims, *Glowny* does not teach the claimed peer-to-peer environment, which involves pushing of context and content edit changes to document replicates (as is evident through the use of "multiple fragment editor executables that function

² I.e., "Nakao fails to disclose that said multiple fragment editor executables are distributed among multiple sites of a computer network and operate in a peer-to-peer environment without the need for a central server." Office action, page 3.

cooperatively as one implemented document type declaration").³ *Glowny*'s system makes requests, and thereby *pulls* data using the remote-procedure-call (RPC) model. *Glowny* appears to teach that software can respond to a request to be copied and installed on a remote system, which installed software is comprised of a particular operation. *Glowny* further appears to teach that execution of the now remote operation can then be accomplished using a remote command execution procedure. This remote execution of operations in *Glowny* conflicts with the claimed limitation of allowing multiple authors to edit a distributed document contemporaneously.

It appears that the Office has interpreted *Glowny*'s disclosure as indicating that participants may be drawn from a single pool of computers, and thus comprises a peer-to-peer environment. However, all *Glowny* behavior follows the RPC model. The RPC model is inherently client-server (note that the present claims expressly do not require a central server). Since both *Nakao* and *Glowny* use the RPC client-server model, neither system can teach or suggest how the client recipients would handle the inevitable unsolicited content update or change events (*i.e.*, edits) that are inherent in the present claims. This is so, in part, because unlike in the claimed system, *Nakao*'s and *Glowny*'s systems do not teach or suggest where to apply each update. If the hypothetical case were presented (which it is not) that two *Glowny* peers could establish a reciprocal RPC relationship, these peers still would not have built-in destinations in the document for the "pulled" information (comprised in the multiple fragment editor executables), nor would they know when to pull them (in contrast to the claimed system where all information is "pushed" to precisely known destinations due to the DTD functioning of the multiple fragment editor executables). Accordingly, *Glowny* does not teach or suggest a "peer-to-peer environment" as contemplated in the present claims.

Based on the foregoing it is evident that the asserted combination of *Glowny* with *Nakao* fails to teach at least the following elements of claim 1: (1) "multiple fragment editor executables that function cooperatively as one implemented document type declaration (DTD)"; (2)

³ As further described in the specification, the claimed system "pushes" edit events. In this system, concomitant behavior comprises document replicates at each site; change is an event that drives synchronizing changes at other replicate sites without which they would no longer be classifiable as replicates. The push technology of the claims is utilized in a peer-to-peer network where each DTD node publishes to all other replicate nodes with the same element name and context placement at other sites, and at the same time subscribes to context and content changes from all other nodes. These events are contemporaneous. The sum of these nodes' naming and code behavior is referred to in the claims and specification as implementing one implemented DTD.

operation “in a peer-to-peer environment without need for a central server”; and (3) “allowing multiple authors to edit the distributed document contemporaneously while allowing each of the multiple authors to view edits made by others of the multiple authors contemporaneously.” As such, assuming *arguendo* that the combination of *Glowny* with *Nakao* were appropriate and adequately supported by the Office (which does not appear to be the case here), this combination fails to teach all elements of claims 1-2, 8-9 and 13-14. As such, the applicant respectfully requests withdrawal of this rejection.

The necessity of discussing the remainder of the obviousness rejections directed to each of the dependent claims 2-26 is rendered moot as the primary reference, *Nakao*, and the secondary reference, *Glowny*, fail to teach material limitations of the only pending independent claim, claim 1. Both *Nakao* and *Glowny* are used in each of the remaining obviousness rejections. None of the additionally cited references fill the gaps left by the primary and secondary references with respect to claim 1; thus their relevance to the dependent claims is minimal at best and certainly not prejudicial to patentability of any of the pending claims. Nevertheless, out of concern for efficiency in the prosecution of the present application, the applicant sets forth a discussion of the remaining obviousness rejections below.

Rejection of Dependent Claims 3 and 4 Under 35 U.S.C. § 103

Claims 3 and 4 stand rejected under 35 U.S.C. § 103 as purportedly obvious over *Nakao*, in view of *Glowny*, and further in view of U.S. Patent No. 5,918,010 (*Appleman*). Claims 3 and 4 depend from independent claim 1. The applicant respectfully traverses.

Claims 3 and 4 depend from claim 1. As described above, the combination of *Glowny* with *Nakao* fails to teach multiple limitations of claim 1. The inclusion of *Appleman* in this combination of references fails to teach at least the deficiencies of these references versus claim 1. As such, regardless of any purported relevance of *Appleman* to the stand-alone limitations of claims 3 or 4, the addition of this reference fails to teach or suggest the overall invention claimed in these claims, each of which incorporate the limitations of claim 1. As such, the applicant respectfully requests withdrawal of this rejection.

Rejection of Dependent Claims 5 and 6 Under 35 U.S.C. § 103

Claims 5 and 6 stand rejected under 35 U.S.C. § 103 as purportedly obvious over *Nakao*, in view of *Glowny* and *Appleman*, and further in view of U.S. Patent No. 5,764,731 (*Yablon*). The applicant respectfully traverses.

Claims 5 and 6 depend directly from claim 3 and indirectly from claim 1. As described above, the combination of *Glowny*, *Nakao* and *Appleman* fails to teach multiple limitations of claims 1 and 3. The inclusion of *Yablon* in this combination of references also fails to teach at least the deficiencies of these references versus claims 1 and 3. As such, regardless of any purported relevance of *Yablon* to the stand-alone limitations of claims 5 or 6, the addition of this reference fails to teach or suggest the overall invention claimed in these claims, each of which incorporate the limitations of claim 1. As such, the applicant respectfully requests withdrawal of this rejection.

Rejection of Dependent Claim 7 Under 35 U.S.C. § 103

Claim 7 stands rejected under 35 U.S.C. § 103 as purportedly obvious over *Nakao*, in view of *Glowny*, and further in view of U.S. Patent No. 6,802,022 (*Olson*). The applicant respectfully traverses.

Claim 7 depends from claim 1. As described above, the combination of *Glowny* with *Nakao* fails to teach multiple limitations of claim 1. The inclusion of *Olson* in this combination of references fails to teach at least the deficiencies of these references versus claim 1. As such, regardless of any purported relevance of *Olson* to the stand-alone limitations of claim 7, the addition of this reference fails to teach or suggest the overall invention claimed in these claims, each of which incorporate the limitations of claim 1. As such, the applicant respectfully requests withdrawal of this rejection.

Rejection of Dependent Claims 10 and 12 Under 35 U.S.C. § 103

Claims 10 and 12 stand rejected under 35 U.S.C. § 103 as purportedly obvious over *Nakao*, in view of *Glowny*, and further in view of U.S. Patent No. 6,519,603 (*Bays*). The applicant respectfully traverses.

Claims 10 and 12 depend from claim 1. As described above, the combination of *Glowny* with *Nakao* fails to teach multiple limitations of claim 1. The inclusion of *Bays* in this combination of references fails to teach at least the deficiencies of these references versus claim 1. As such, regardless of any purported relevance of *Bays* to the stand-alone limitations of claims 10 or 12, the addition of this reference fails to teach or suggest the overall invention claimed in these claims, each of which incorporate the limitations of claim 1. As such, the applicant respectfully requests withdrawal of this rejection.

Rejection of Dependent Claims 11 and 15-26 Under 35 U.S.C. § 103

Claims 11 and 15-26 stand rejected under 35 U.S.C. § 103 as purportedly obvious over *Nakao*, in view of *Glowny*, and *Bays*, and further in view of U.S. Patent No. 5,297,279 (*Bannon*). The applicant respectfully traverses.

Claims 11 and 15-26 depend directly or indirectly from claim 1. As described above, the combination of *Glowny* with *Nakao* fails to teach multiple limitations of claim 1. The inclusion of *Bays* and *Bannon* in this combination of references fails to teach at least these above described limitations. As such, regardless of any purported relevance of *Bays* and/or *Bannon* to the stand-alone limitations of claims 11 and 15-26, the addition of these references fails to teach or suggest the overall invention claimed in these claims, each of which incorporate the limitations of claim 1. As such, the applicant respectfully requests withdrawal of this rejection.

CONCLUSION

Applicant respectfully submits that claims 1-26, as amended, are in condition for allowance.

If, for any reason, the Examiner determines that the pending claims are not in condition for allowance, applicant requests that the Examiner call the undersigned attorney at 202-736-8143 in an effort to resolve any matter still outstanding *before* the issuance of another action.

Favorable reconsideration is respectfully requested.

Respectfully submitted,



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